

Computation Offloading Scenario with Multiple Access Points

Master Thesis / Bachelor Thesis / Project Seminar

Mobile devices (smartphone, notebook,...) are usually limited by their battery capacity or the computation power of their processor. Computation Offloading offers the ability to compute tasks at a distant server with more resources.

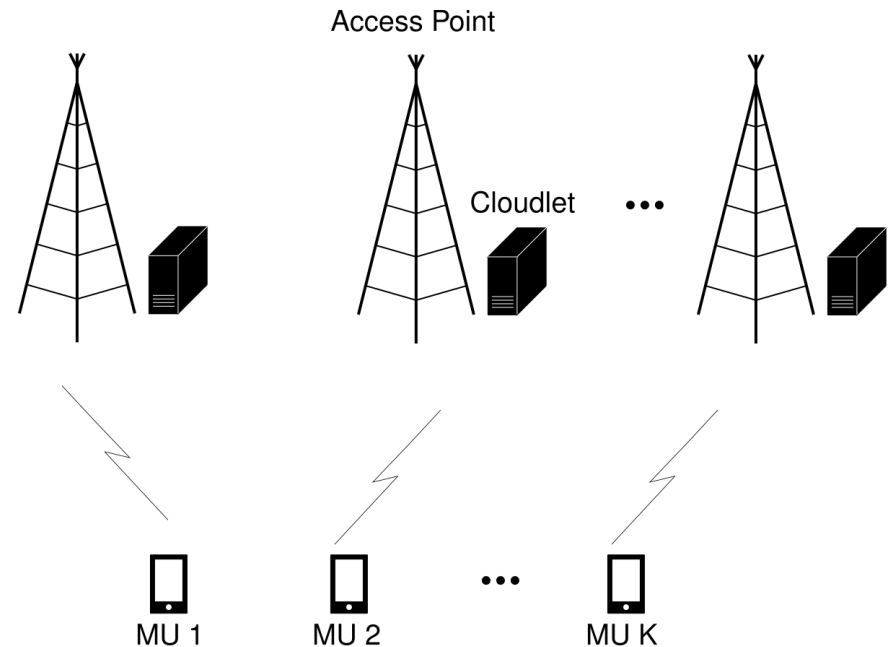
This project seminar or thesis should evaluate the assignment of multiple mobile devices to multiple wireless access points, each with a small server (cloudlet) attached. The mobile devices shall decide, whether offloading their task is beneficial in terms of saving energy.

Tasks:

- Understand the basics of optimization and game theory
- Review the related works
- Design new algorithms considering the mentioned parameters
- Evaluate the performance of the algorithm by simulation

Requirements:

- High motivation in doing research in the field of communications
- Basic knowledge about principals of communications
- Programming skills (in best case already with MATLAB)



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